

REMARKS

This is in response to the Office Action dated January 20, 2004. Claims 1-3, 5-13, 17-20 and 28-36 are pending. This Amendment After Final should be entered since the only claim change is to correct a typographical error in withdrawn claim 13.

Applicant notes with appreciation the Examiner's allowance of claims 17 and 28. Applicant further notes with appreciation the Examiner's indication that claims 29 and 33 contain allowable subject matter.

The previous ground of rejection has been withdrawn. However, a new ground of rejection has been made under 35 U.S.C. Section 103(a) as to certain claims in the Office action dated January 20, 2004.

Claim 1 now stands rejected under 35 U.S.C. Section 103(a) as being allegedly unpatentable over Jones in view of Okoshi. This Section 103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that "the optical element comprises a plurality of cubic corner cubes, each of which comprises a first set of triangular planes defined by the first concave portion and a second set of triangular planes defined by the second concave portion so as to provide each cubic corner cube with substantially square reflective planes opposed substantially perpendicular to one another." **The instant specification explains that a "cubic corner cube" is defined as a structure with three substantially square reflective planes S1, S2 and S3 that are opposed substantially (at or almost) perpendicular to one another** (e.g., see Figs. 2A-2C and 3C-3D; and paragraphs [0009]-

[0010]). It can be seen in Fig. 5 of the instant specification that the triangular planes from the respective first and second members when combined together cause substantially square reflective planes of the claimed cubic corner cubes to be formed.

Moreover, the instant specification clearly *differentiates* between (a) cubic corner cube type retroreflectors as called for in claim 1, and (b) undesirable triangular pyramidal corner type retroreflectors (*as in Okoshi*). The instant specification explains that triangular pyramidal corner type retroreflectors (*as in Okoshi*) are problematic in that they are not particularly efficient; i.e., incoming light cannot be efficiently reflected in the desired direction as shown in Figs. 3A-3B of the instant application (e.g., see also paragraphs [0015] - [0018]). In contrast, cubic corner cube type retroreflectors as called for in claim 1 (in contrast to Okoshi and Jones) are much more efficient retroreflectors than are triangular pyramidal corner type retroreflectors, as shown in Figs. 3C-3D of the instant application (see also paragraphs [0019] and [0087]).

The cited art fails to disclose or suggest the cubic corner cube aspect of claim 1 (which necessarily requires three substantially square reflective planes S1, S2 and S3 that are opposed substantially perpendicular to one another as defined in the instant specification and explained above). The Office Action *admits* that Jones fails to disclose or suggest cubic corner cube type retroreflectors. In particular, each of members 30d and 30d' in Jones is a triangular pyramidal corner cube array and consists of three orthogonal reflective *triangular* faces (i.e., a set of triangular planes) as shown in Figs. 1a and 1b.

Thus, it can be seen that Jones fails to disclose or suggest the claimed *cubic* corner cube aspect of claim 1.

Apparently recognizing this fundamental flaw in Jones, the Office Action cites Okoshi and alleges that Okoshi discloses the cubic corner cube retroreflector(s) required by claim 1. However, the Office Action's interpretation of Okoshi is incorrect in this regard. Okoshi's reflectors are of the *triangular pyramidal corner cube* type (and thus not of the cubic corner type) because Okoshi's cubes are defined by *triangular* faces. The instant specification makes clear that the type of retroreflector shown in Figs. 3A and 3B of the instant application (and also in Okoshi) is NOT a cubic corner cube retroreflector as called for in claim 1 (see discussion above). Instead, the instant specification explains that the type of retroreflector shown in Figs. 3A-3B of the instant application and in Okoshi is a triangular pyramidal corner cube type since it is defined by triangular (not square) planes. As explained in the instant specification, this type of retroreflector is undesirable and is unrelated to the invention of claim 1.

Because both Jones and Okoshi fail to disclose or suggest the cubic corner cube type of retroreflector required by claim 1, the invention of claim 1 would not be met even if the two references were combined as alleged in the Office Action. Thus, even the alleged combination (which applicant believes is inappropriate in any event) fails to meet the invention of claim 1.

Applicant notes that the fact that Okoshi calls his reflector a "cubic corner type reflector" is irrelevant (e.g., see col. 6, lines 8-18). In accordance with U.S. law, a

patentee is entitled to be his own lexicographer. Here, the application has clearly defined the structure of Okoshi as a *triangular pyramidal* corner cube type structure, and not a cubic corner type structure (see discussion above, and citations mentioned above to specification).

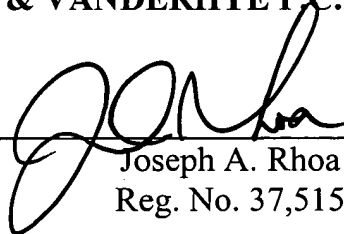
Claim 18 also calls for a cubic corner cube type of structure. As explained above, both cited references fail to disclose or suggest this aspect of claim 18. Thus, even the alleged combination fails to meet the invention of claim 18 in at least this regard.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____


Joseph A. Rhoa
Reg. No. 37,515

JAR:caj
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100